

GSM/GPRS Module



SIM900

SIMCom presents an ultra compact and reliable wireless module-SIM900. This is a complete Quad-band GSM/GPRS module in a SMT type and designed with a very powerful single-chip processor integrating AMR926EJ-S core, allowing you to benefit from small dimensions and cost-effective solutions.

Featuring an industry-standard interface, the SIM900 delivers GSM/GPRS 850/900/1800/1900MHz performance for voice, SMS, Data, and Fax in a small form factor and with low power consumption. With a tiny configuration of 24mm x 24mm x 3 mm, SIM900 can fit almost all the space requirements in your M2M applications, especially for slim and compact demands of design.

Smart Machine Smart Decision

General features

- Quad-Band 850/ 900/ 1800/ 1900 MHz
- GPRS multi-slot class 10/8
- GPRS mobile station class B
- Compliant to GSM phase 2/2+
 - Class 4 (2 W @850/ 900 MHz)
 - Class 1 (1 W @ 1800/1900MHz)
- Dimensions: 24* 24 * 3 mm
- Weight: 3.4g
- Control via AT commands (GSM 07.07 ,07.05 and SIMCOM enhanced AT Commands)
- SIM application toolkit
- Supply voltage range 3.4 ... 4.5 V
- Low power consumption
- Normal Operation temperature: -30 ° C to +80 ° C

Specifications for Fax

- Group 3, class 1

Specifications for Data

- GPRS class 10: max. 85.6 kbps (downlink)
- PBCCCH support
- Coding schemes CS 1, 2, 3, 4
- CSD up to 14.4 kbps
- USSD
- Non transparent mode
- PPP-stack

Specifications for SMS via GSM/GPRS

- Point to point MO and MT
- SMS cell broadcast
- Text and PDU mode

Drivers

- MUX Driver

Specifications for Voice

- Tricodec
 - Half rate (HR)
 - Full rate (FR)
 - Enhanced Full rate (EFR)
- Hands-free operation (Echo suppression)
- AMR
 - Half rate (HR)
 - Full rate (FR)

Interfaces

- Interface to external SIM 3V/ 1.8V
- analog audio interface
- RTC backup
- SPI interface
- Serial interface
- Antenna pad
- I2C
- GPIO
- PWM
- ADC

Compatibility

- AT cellular command interface

Approvals (on going)

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| •CE | •AT&T |
| •FCC | •IC |
| •ROHS | •ICASA |
| •PTCRB | •TA |
| •GCF | |